

## CLAIMS

1. A bioassay substrate being a disk-shaped substrate having such a configuration that reaction regions to be fields for interactions between substances are arranged and electrodes are provided in said reaction regions, wherein

feeder wirings are extended from a current passing portion provided at a central portion of said substrate, and are connected to said electrodes.

2. The bioassay substrate as set forth in claim 1, wherein said feeder wirings are each comprised of a first wiring extended from said current passing portion toward the outer circumference side, and a second wiring branched and led out from said first wiring.

3. The bioassay substrate as set forth in claim 2, wherein said first wiring is extended radially from said current passing portion.

4. The bioassay substrate as set forth in claim 2, wherein said first wiring is extended in the form of a straight line and/or a curved line.

5. The bioassay substrate as set forth in claim 2, wherein a plurality of said first wirings are provided.

6. The bioassay substrate as set forth in claim 2, wherein said second wiring is extended in the

circumferential direction.

7. The bioassay substrate as set forth in claim 2, wherein said second wirings are extended in the form of concentric circles or a spiral line.

8. The bioassay substrate as set forth in claim 5, wherein said second wirings are led out alternately from the adjacent first wirings.

9. The bioassay substrate as set forth in claim 5, wherein said second wirings are each connected to only one first wiring.

10. The bioassay substrate as set forth in claim 2, comprising said second wiring which is connected to a plurality of said first wirings.

11. The bioassay substrate as set forth in claim 2, wherein said first wiring is used as a reference for a rotation synchronizing signal.

12. The bioassay substrate as set forth in claim 2, wherein said second wiring is used as a reference for a tracking signal.

13. The bioassay substrate as set forth in claim 1, wherein said current passing portion is comprised of a single current passing region.

14. The bioassay substrate as set forth in claim 1, wherein said current passing portion is circular or ring-

like in shape.

15. The bioassay substrate as set forth in claim 1, wherein said current passing portion is divided into a plurality of independent partial current passing regions.

16. The bioassay substrate as set forth in claim 14, wherein at least one first wiring is extended from each of said partial current passing regions.

17. The bioassay substrate as set forth in claim 14, wherein said second wirings are led out alternately from the adjacent first wirings.

18. The bioassay substrate as set forth in claim 1, wherein a hole is formed in a central portion of said current passing portion.

19. The bioassay substrate as set forth in claim 18, wherein said hole is provided with a circumferential-direction positioning portion for a current passing jig and/or a chucking jig to be inserted in said hole.

20. The bioassay substrate as set forth in claim 19, wherein said positioning portion is a recess or a projection formed in said hole.

21. The bioassay substrate as set forth in claim 18, wherein the position or positions in the circumferential direction of said current passing jig and/or said chucking jig to be inserted in said hole are

determined by the shape of said hole.

22. The bioassay substrate as set forth in claim 1, wherein said feeder wirings are formed by use of a plurality of wiring layers.

23. The bioassay substrate as set forth in claim 22, wherein said feeder wirings extended in said plurality of wiring layers are exposed to front on said current passing portion, and the exposed wiring terminal portions are connected to said current passing portion.

24. The bioassay substrate as set forth in claim 22, wherein at least one of said plurality of wiring layers is comprised of an electrode layer uniform over the whole area.

25. The bioassay substrate as set forth in claim 22, wherein at least one of said plurality of wiring layers is covered with an insulation layer.

26. The bioassay substrate as set forth in claim 25, wherein said insulation layer is an oxide layer.

27. The bioassay substrate as set forth in claim 22, wherein said wiring layer located on the side where an excitation beam for reading said interactions is incident is comprised of a conductive film which is transparent or semi-transparent to rays in the excitation beam wavelength region.

28. The bioassay substrate as set forth in claim 27, wherein said conductive film is comprised of a film selected from the group consisting of an ITO film, a  $\pi$  electron system conductive polymer film, and a metallic thin film having a thickness of not more than 50  $\mu\text{m}$ .